PCA UPDATE

INTRAVENOUS POTASSIUM CHLORIDE

January, 1997

Through its review of major incident reports, the Board's Patient Care Assessment (PCA) Committee has become aware of several serious patient outcomes, including deaths, associated with the administration of intravenous (IV) potassium chloride. While the circumstances surrounding each incident have varied, they usually involved high <u>concentrations</u> of potassium chloride administered in boluses through central IV lines.

We have reviewed a number of current hospital policies and procedures dealing with IV potassium chloride. Many of them are well designed, but none are foolproof and several allow for the administration of a potentially unsafe concentration of potassium. It is important to remember that when potassium is infused as a bolus, particularly through a central line, the risk of acute cardiotoxicity is related more to the potassium *concentration* of the bolus and the *rate of administration* than to the total amount of potassium delivered.

The PCA Committee plans to convene a panel of experts to study the issues involved in IV potassium therapy. From this effort, we hope to formulate an approach that may be helpful to hospitals as they develop or review their own policies and procedures. We will keep you informed of our progress and send you our suggestions upon completion of our work.

In the meanwhile, please be alerted to the possible dangers involved in the administration of high concentrations of IV potassium chloride. We recommend that you review your own procedures and protocols. If you have policies that you believe may have reduced or prevented errors involving IV potassium, we would like to know about them and we encourage you to send them to us. Thank you for your attention to this matter.